

Work Order ID 89364

89364

Page 1

August-24-12 1:33:59 PM

Item ID: D407-558-045

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Single Cargo Mirror Assembly, 6 inch Round

Start Date: 8/16/12 **Start Qty:** 1.00 ***1 ***

Cust Item ID:

Required Date: 9/14/12 **Req'd Qty:** 1.00

1

Customer:

Reference:

Approvals: Process Plan: M1 T

Date: 17/08/29 Tooling:

Date:

Run Start *NP1*

Date: / / SPC (Y/N)

Date:

QC:

NR2

NCR: Yes No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA *A* Date:QA Closed: *if* Date:*12/09/09 10:27*

Work Order: <u>89364</u>	DISPOSITION	AGAINST DEPARTMENT/PROCESS			
Part No. <u>DL07-558-045</u>	Rework <input checked="" type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input checked="" type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
NCR No. <u>12-1839</u>					

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	<i>X</i>								
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General			
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced	
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure	
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld	
<input type="checkbox"/> Crushed/Crimped.	<input type="checkbox"/> Burrs	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled	
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Part Moved		
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Positioned Wrong		
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Power Loss/Surge		
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> <i>w/o + Bom not currently updated</i>	<input checked="" type="checkbox"/> Other	
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing			
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish			
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio			

Work Order ID 89364***89364***

Page 2

August-24-12 1:33:59 PM

Item ID: D407-558-045**Accept*****N900040100*****Setup****Start*****NS1*****Revision ID:****Item Name:** Single Cargo Mirror Assembly, 6 inch Round**Stop*****NS2*****Start Date:** 8/16/12 **Start Qty:** 1.00 ***1*****Cust Item ID:****Required Date:** 9/14/12 **Req'd Qty:** 1.00 ***1*****Customer:****Reference:****Approvals:** **Process Plan:****Date:****Tooling:****Date:****Run****Start*****NR1*****QC:****Date:****SPC (Y/N):****Date:****Stop*****NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00	DAS 16 8-9	(2) 9/24					
125 *125* Packaging Packaging	Pick Kit Memo	0.00 0.00							1X SP 12-9-24.
130 *130* QC Quality Control	QC4- 100% Inspect kits for completeness Memo	0.00 0.00	DAS 16 8-9	11/124					

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS						
			Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other				
Part No. _____		NCR No. _____									
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <hr/> <hr/> <hr/>	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <hr/> <input type="checkbox"/> Other

Picklist Print

August-24-12 1:33:58 PM

Page 1

Work Order ID: 89364

Parent Item: D407-558-045

Start Date: 8/16/12

Required Date: 9/14/12

Parent Item Name: Single Cargo Mirror Assembly, 6 inch Round

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 09-01-15 new issue DD verified by:ec IPP Rev:B 10.06.17 added grommet
DD verf:EC IPP REV:C 11.01.19 AS PER chg002 DD VERF:EC IPP
REV:D 12.04.04 AS PER chg003 DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3-4A Bolt		Purchased	No			125	Each	678.0000	4	SP 4			

Location	Loc Qty	Loc Code
ST350	678	
102832	88	
104291	4	
107321	8	
117317	98	4X
120308	80	
120770	200	
122814	200	

AN526-1032R9
Screw

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
		Purchased	No			125	Each	77.0000	4	m 121060 SP			

Location	Loc Qty	Loc Code
ST347	72	
121060	72	
ST348	5	
116900	4	
117395	1	

AN960JD10

Washer

AN960JD10L

Washer

D2011-101

6" Mirror

NAS1149D0363J Purchased No 110 Each 0.0000

4 m 122348 SP

NAS1149D0332J Purchased No 125 Each 0.0000

6 m 122973 6x SP

Manufactured No 110 Each 8.0000

1 m 12-9-24.

Location	Loc Qty	Loc Code
ST226	8	
79943	8	

1 X

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____		DISPOSITION			AGAINST DEPARTMENT/PROCESS					
		Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
		Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
		Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
		Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other						
				<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled						

Picklist Print

August-24-12 1:33:58 PM

Page 2

Work Order ID: 89364

Parent Item: D407-558-045

Parent Item Name: Single Cargo Mirror Assembly, 6 inch Round

Start Date: 8/16/12

Required Date: 9/14/12

Start Qty: 1.00

Required Qty: 1.00

D2052
Mounting Bracket

Manufactured No

110 Each 24.0000 2 2

J. S. 2/09/24

D2053
Mounting Bracket

Manufactured No

125 Each 15.0000

SP.

D2054
Bushing

Manufactured No

110 Each 31.0000

JK 2/09/24

D2055
Clamp

Manufactured No

110 Each 30.0000

J. S. 2/09/24

D2056
Bell Crank

Manufactured No

110 Each 21.0000

J. S. 2/09/24

NCR: Yes / No

DQA: Date:

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Picklist Print

August-24-12 1:33:58 PM

Page 3

Work Order ID: 89364

Parent Item: D407-558-045

Parent Item Name: Single Cargo Mirror Assembly, 6 inch Round

Start Date: 8/16/12

Required Date: 9/14/12

Start Qty: 1.00

Required Qty: 1.00

D2057

Manufactured No

110 Each 10.0000

1

1

Plug

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
GA	10	
71888	3	
75070	7	

1

1

SP 12-09-24

D2065

Manufactured No

110 Each 3.0000

1

Arm

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST229	3	
73053	2	
83168	1	

1

1

SP

D2067
Connector

Manufactured No

125 Each 11.0000

0

1

SP

D2071-3
Cable

Manufactured No

125 Each 23.0000

1

1

SP

D3778-1
Bracket

Manufactured No

125 Each 9.0000

1

1

SP 12-9-24

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST222	23	
73054	5	
81894	8	
82671	10	

1

1

SP

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST228	9	
71205	3	
86133	6	

1

1

SP

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other						

Picklist Print

Page 4

August-24-12 1:33:58 PM

Work Order ID: 89364

Parent Item: D407-558-045

Parent Item Name: Single Cargo Mirror Assembly, 6 inch Round

Start Date: 8/16/12

Required Date: 9/14/12

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

110

Each

3,165.0000

2

Sp

Nut

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
316	795	
122452	795	
ST300	680	
117885	32	
119017	510	
119075	138	
ST317	1690	
122141	1690	

MS21042L3

Purchased

No

125

Each

3,165.0000

0

Sp

Nut

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
316	795	
122452	795	
ST300	680	
117885	32	
119017	510	
119075	138	
ST317	1690	
122141	1690	

MS21919-DG5

Purchased

No

125

Each

85.0000

Clamp

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
306	9	
121652	9	
ST306	26	
119638	1	
120731	25	
ST321	50	
122807	50	

NCR: Yes / No

DQA: Date:

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
Part No. _____			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
NCR No. _____			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear			General								
Bending	<input type="checkbox"/>	Bend	<input type="checkbox"/>	Grain	<input type="checkbox"/>	Ovalized	<input type="checkbox"/>	Pressure/Forced			
Centre Not Concentric to O/S	<input type="checkbox"/>	BOM/Route	<input type="checkbox"/>	Hardware	<input type="checkbox"/>	Over/Under tolerance	<input type="checkbox"/>	Temperature/Cure			
Cracks	<input type="checkbox"/>	Broken/Damaged	<input type="checkbox"/>	Inspection Incomplete	<input type="checkbox"/>	Part Incorrect	<input type="checkbox"/>	Weld			
Crushed/Crimped.	<input type="checkbox"/>	Burrs	<input type="checkbox"/>	Instructions Incomplete/Unclear	<input type="checkbox"/>	Part Lost/Missing	<input type="checkbox"/>	Wrong Stock Pulled			
Cuffs	<input type="checkbox"/>	Contamination	<input type="checkbox"/>	Maintenance	<input type="checkbox"/>	Part Moved	<input type="checkbox"/>				
Heat Treat	<input type="checkbox"/>	Countersink	<input type="checkbox"/>	Mislabeled	<input type="checkbox"/>	Positioned Wrong	<input type="checkbox"/>				
Inspection Strip in Tube	<input type="checkbox"/>	Cut Too Short	<input type="checkbox"/>	Misread	<input type="checkbox"/>	Power Loss/Surge	<input type="checkbox"/>				
Ripples in Bend	<input type="checkbox"/>	Drill Holes	<input type="checkbox"/>	Offset	<input type="checkbox"/>	Other	<input type="checkbox"/>				
Torque Waves in Extrusion	<input type="checkbox"/>	Drawing	<input type="checkbox"/>	Out of Calibration	<input type="checkbox"/>		<input type="checkbox"/>				
Turning Sequence	<input type="checkbox"/>	Finish	<input type="checkbox"/>	Out of Sequence	<input type="checkbox"/>		<input type="checkbox"/>				
Wave/Twist in Tube	<input type="checkbox"/>	Folio	<input type="checkbox"/>	Outside Dimensions	<input type="checkbox"/>		<input type="checkbox"/>				

Picklist Print

Page 5

August-24-12 1:33:58 PM

Work Order ID: 89364

Parent Item: D407-558-045

Parent Item Name: Single Cargo Mirror Assembly, 6 inch Round

Start Date: 8/16/12

Required Date: 9/14/12

MS27039-1-18

Purchased No

0110 Each

37.0000

2

2

Screw

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST291	37	
115589	1	
<u>120308</u>	11	<u>2X</u>
121556	25	

MS35489-67

GROMMET

Purchased No

Each

105.0000

1

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST295	105	
111193	7	
<u>121600</u>	98	<u>1X</u>

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS									
Part No. _____		Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>							
NCR No. _____		Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>							
		Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>							
		Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>								
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector				
Doc/Data													
Equip/Tooling													
Operator													
Material													
Setup													
Other													
Process													
Supplier													
Training													
Unapproved													
FAULT CATEGORY													
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <hr/> <hr/> <hr/>			
										<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <hr/>			
										<input type="checkbox"/> Other			

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D206-558 REV. C OR EARLIER
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D206-558 REV. 0

REF: CANADIAN STC SH92-17

REF: FAA STC SH1031NE

IT HAS COME TO DART'S ATTENTION THAT A LONGER CABLE IS REQUIRED WHEN INSTALLING THE DART D206-558-041/-043 SINGLE/DUAL CARGO MIRROR ASSEMBLY ON A BHT 407 AIRCRAFT. THIS IS DUE TO THE MIRROR INSTALLATION BEING MOVED FORWARD TO PICK UP ON EXISTING SET OF SCREW HOLES ON THE BELLY OF THE AIRCRAFT AS SHOWN IN FIGURE 3 OF INSTALLATION INSTRUCTIONS D206-558 REV. C OR EARLIER.

IT IS ACCEPTABLE TO REPLACE THE D2071 CABLE ASSEMBLY WITH D2071-3 CABLE ASSEMBLY. FURTHERMORE, IT MAY BE NECESSARY TO REPLACE THE MS35489-9 GROMMET WITH MS35489-67 GROMMET TO ACCOMODATE A POSSIBLE VARIANCE IN MATERIAL THICKNESS ON A BHT 407 AIRCRAFT AS OPPOSED TO A BHT 206 AIRCRAFT.

CUSTOMERS INSTALLING EXISTING D206-558-041/-043 KIT ON A BHT 407 AIRCRAFT MUST PROCURE THE FOLLOWING KIT FROM DART:

DSI 9436-011 PARTS LIST:

Qty -011	Part Number	Description
X	DSI 9436-011	CABLE CHANGE KIT
1	D2071-3	CABLE ASSEMBLY (REPLACES D2071)
1	MS35489-67	GROMMET (REPLACES MS35489-9)

INSTALL THE D2071-3 CABLE ASSEMBLY AND MS35489-67 GROMMET PER INSTALLATION INSTRUCTIONS D206-558 REV. C OR EARLIER AND MAINTAIN PER ICA-D206-558 REV. 0.

CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	D. SHEPHERD (DE # 02)
DATE:	08.12.04
CERT. NO.:	SH92-17
ISSUE NO.:	7

SHOP COPY
RETURNS
ENGINEERING
UNCONTROLLED
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK IN PROGRESS
NO. 89364 M/C
12/08/29

A	NEW ISSUE	MB	08.12.04
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>1A</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>1A</i>		
CHECKED	<i>PS</i>		
MFG. APPR.	<i>N/A</i>		
APPROVED	<i>JP</i>	DRAWING NO.	REV. A
DE APPR.	<i>JP</i>	DSI 9436	SHEET 1 OF 2
DATE	08.12.04	TITLE	SCALE
		CABLE CHANGE	
NTS			
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FROM THIS POINT FORWARD, CUSTOMERS SHOULD ORDER D407-558-045/-047 IN LIEU OF D206-558-041/-043 WHEN PROCURING SINGLE/DUAL MIRRORS FOR BHT 407 MODELS. AMEND SECTIONS 4.0 AND 5.0 OF INSTALLATION INSTRUCTIONS D206-558 REV. C OR EARLIER AND 25.3 AND 25.4 OF ICA-D206-558 REV. 0 AS FOLLOWS:

4.0 WEIGHT AND BALANCE (D206-558 REV. C OR EARLIER)

25.3 WEIGHT AND BALANCE (ICA-D206-558 REV. 0)

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D206-558-041 Bell 206A/B/L/L1/L3/L4	2.4 lb 1.09 Kg	+5.0 in +0.13 m	+12.0 in-lb +0.14 m-Kg	+14.8 in +0.38 m	+35.5 in-lb +0.41 m-Kg
D206-558-043 Bell 206A/B/L/L1/L3/L4	3.0 lb 1.36 Kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-Kg	+14.8 in +0.38 m	+44.4 in-lb +0.52 m-Kg
D407-558-045 Bell 407	2.4 lb 1.09 Kg	+5.0 in +0.13 m	+12.0 in-lb +0.14 m-Kg	+14.8 in +0.38 m	+35.5 in-lb +0.41 m-Kg
D407-558-047 Bell 407	3.0 lb 1.36 Kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-Kg	+14.8 in +0.38 m	+44.4 in-lb +0.52 m-Kg

5.0 PARTS LIST (D206-558 REV. C OR EARLIER)

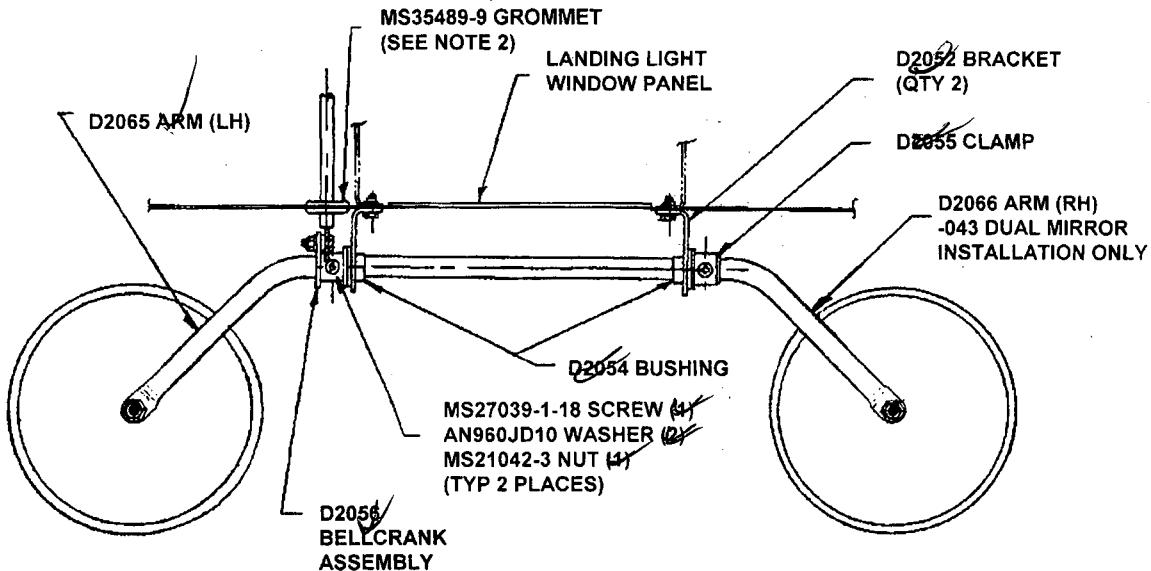
25.4 PARTS LIST (ICA-D206-558 REV. 0)

Qty -041	Qty -043	Qty -045	Qty -047	Part Number	Description
X				D206-558-041	SINGLE CARGO MIRROR ASSEMBLY
	X			D206-558-043	DUAL CARGO MIRROR ASSEMBLY
		X		D407-558-045	SINGLE CARGO MIRROR ASSEMBLY
			X	D407-558-047	DUAL CARGO MIRROR ASSEMBLY
1	2	1	2	D2011-101	MIRROR ASSEMBLY
2	2	2	2	D2052	BRACKET
1	1	1	1	D2053	BRACKET
2	2	2	2	D2054	BUSHING
1	1	1	1	D2055	CLAMP
1	1	1	1	D2056	BELLCRANK ASSEMBLY
1		1		D2057	PLUG
1		1		D2065	ARM
	1		1	D2066	ARM
1	1	1	1	D2067	CONNECTOR
1	1			D2071	CABLE ASSEMBLY
		1	1	D2071-3	CABLE ASSEMBLY
1	2	1	2	D3014-1	* LOCKNUT
1	1	1	1	D3778-1	BRACKET
4	4	4	4	AN3-4A	BOLT
4	4	4	4	AN526-1032R9	SCREW
1	2	1	2	AN960JD416L	* WASHER
4	4	4	4	AN960JD10	WASHER
6	6	6	6	AN960JD10L	WASHER
3	3	3	3	MS21042-3	NUT (or MS21042L3)
2	2	2	2	MS21919DG5	CLAMP
2	2	2	2	MS27039-1-18	SCREW
1	1			MS35489-9	GROMMET
		1	1	MS35489-67	GROMMET

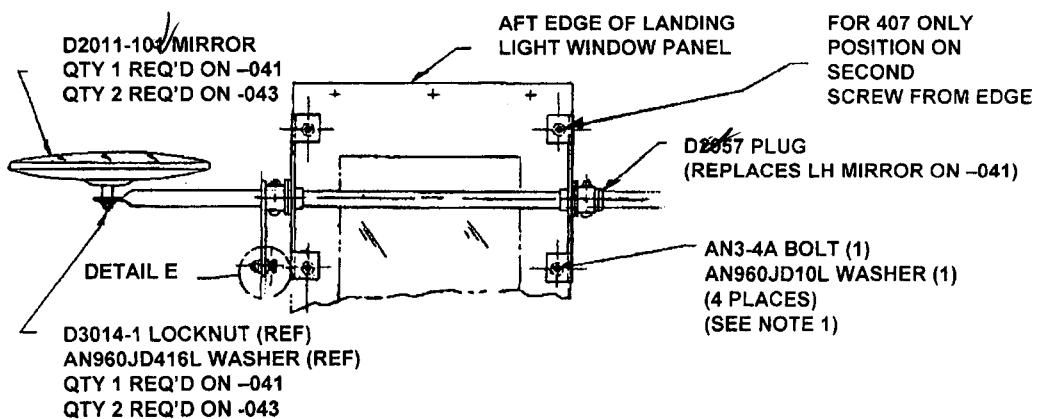
* INCLUDED AS PART OF D2011-101 MIRROR ASSEMBLY

CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-O-01	
APPROVED	
<i>[Signature]</i>	
BY:	D. SHEPHERD (DE # 02)
DATE:	08.12.04
CERT. NO.:	SH92-17
ISSUE NO.:	7

DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	DSI 9436	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	CABLE CHANGE	
DATE	08.12.04	NTS	
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**Figure 25.2 – View A: Looking Aft.
(D206-558-043 Mirror Shown)**



**Figure 25.3 – View C: Looking Down on Mirror Installation
(D206-558-041 Mirror Shown)**

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25-00-00

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Page 3 (4 blank) of 8

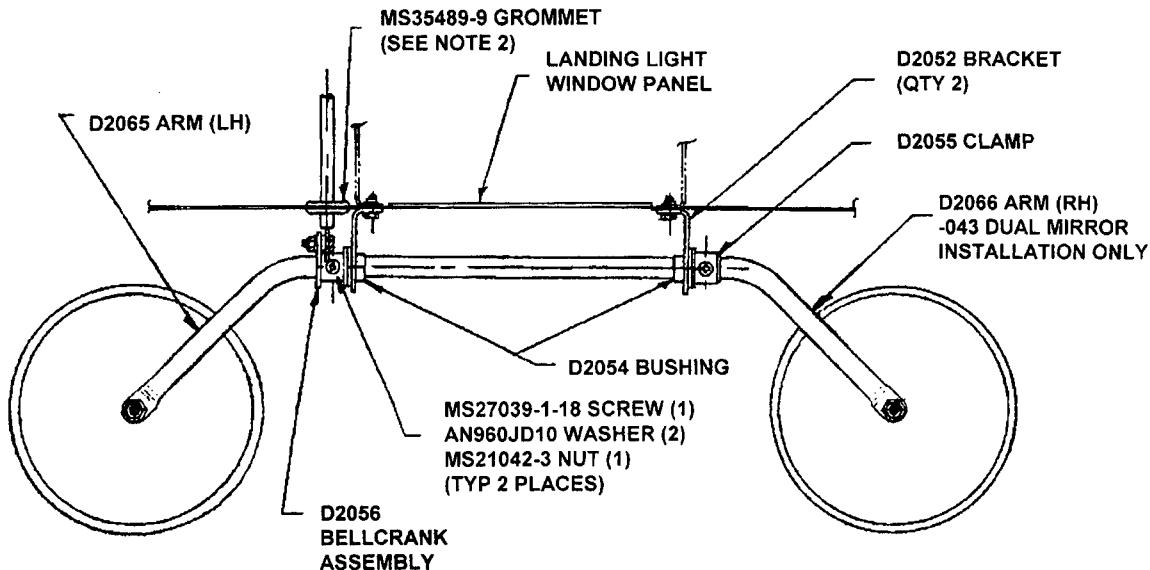
NCR: Yes / No

DQA: _____ Date: _____

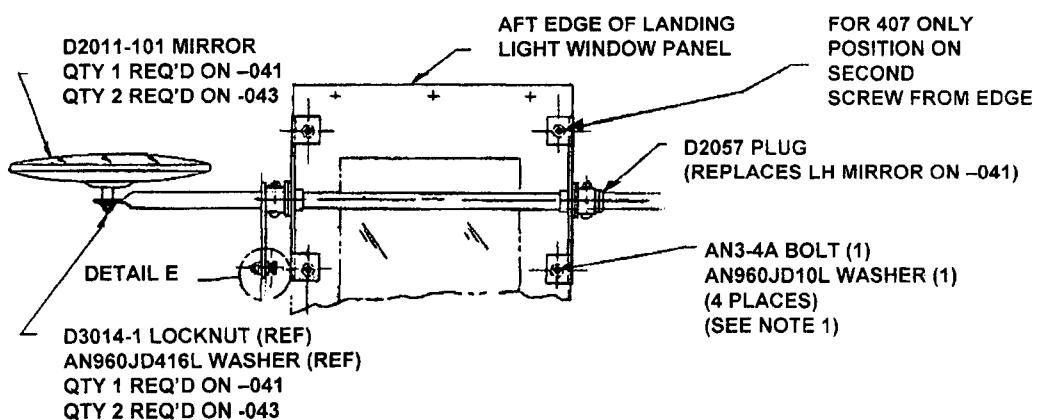
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____		DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____		Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____		Work Order Update <input type="checkbox"/>			Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
					Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>		
					Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>			
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other						



**Figure 25.2 – View A: Looking Aft.
(D206-558-043 Mirror Shown)**



**Figure 25.3 – View C: Looking Down on Mirror Installation
(D206-558-041 Mirror Shown)**

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Page 3 (4 blank) of 8

AMEND SECTIONS 4.0 AND 5.0 OF INSTALLATION INSTRUCTIONS D206-558 REV.C OR EARLIER AND SECTIONS 25-3 AND 25-4 OF ICA-D206-558 REV. D AS FOLLOWS:

4.0 WEIGHT AND BALANCE (D206-558 REV. C OR EARLIER)

25.3 WEIGHT AND BALANCE (ICA-D206-558 REV. 0)

REFERENCE ONLY

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D206-558-041 Bell 206A/B/L/L1/L3/L4	2.4 lb 1.09 Kg	+5.0 in +0.13 m	+12.0 in-lb +0.14 m-Kg	+14.8 in +0.38 m	+35.5 in-lb +0.41 m-Kg
D206-558-043 Bell 206A/B/L/L1/L3/L4	3.0 lb 1.36 Kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-Kg	+14.8 in +0.38 m	+44.4 in-lb +0.52 m-Kg
D407-558-045 Bell 407	2.4 lb 1.09 Kg	+5.0 in +0.13 m	+12.0 in-lb +0.14 m-Kg	+14.8 in +0.38 m	+35.5 in-lb +0.41 m-Kg
D407-558-047 Bell 407	3.0 lb 1.36 Kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-Kg	+14.8 in +0.38 m	+44.4 in-lb +0.52 m-Kg

5.0 PARTS LIST (D206-558 REV. C OR EARLIER)

25.4 PARTS LIST (ICA-D206-558 REV. 0)

Qty -041	Qty -043	Qty -045	Qty -047	Part Number	Description
X				D206-558-041	SINGLE CARGO MIRROR ASSEMBLY
	X			D206-558-043	DUAL CARGO MIRROR ASSEMBLY
	X			D407-558-045	SINGLE CARGO MIRROR ASSEMBLY
		X		D407-558-047	DUAL CARGO MIRROR ASSEMBLY
1	2	-1	2	D2011-101	MIRROR ASSEMBLY
2	2	-2	2	D2062	BRACKET
1	1	1	1	D2053	BRACKET
2	2	-2	2	D2054	BUSHING
1	1	1	1	D2055	CLAMP
1	1	1	1	D2056	BELLCRANK ASSEMBLY
1		1		D2057	PLUG
1		1		D2065	ARM
			1	D2066	ARM
1	1	-1	1	D2067	CONNECTOR
1	1			D2071	CABLE ASSEMBLY
		1	1	D2071-5	CABLE ASSEMBLY
1	2	1	2	D3014-1	*LOCKNUT
1	1			D3778-1	BRACKET
		1	1	D3778-3	BRACKET
4	4	-4	4	AN3-4A	BOLT
4	4	-4	4	AN526-1032R9	SCREW
1	2	-1	2	AN960JD416L	*WASHER
4	4	-4	4	AN960JD10	WASHER
6	6	-6	6	AN960JD10L	WASHER
3	3	-3	3	MS21042-3	.NUT.(or-MS21042L3)
2	2	-2	2	MS21919DG5	CLAMP
2	2	-2	2	MS27039-T-18	SCREW
1	1			MS35489-9	GROMMET
		1	1	MS35489-67	GROMMET

* INCLUDED AS PART OF D2011-101 MIRROR ASSEMBLY

CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-0-01	
APPROVED	
BY:	<i>[Signature]</i>
D. SHEPHERD (DE # 02)	
DATE:	12.03.26
CERT. NO.:	SH92-17
ISSUE NO.:	7

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	AJS		
CHECKED		HAWKESBURY, ONTARIO, CANADA	
MFG. APPR.	N/A	REV. A	
APPROVED	<i>[Signature]</i>	DRAWING NO.	
DE APPR.	<i>[Signature]</i>	DSI 9604	
DATE	12.03.26	TITLE	SCALE
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		NTS	
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